MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2016/2017

DCS5018 – COMPUTER SYSTEMS & APPLICATIONS

(For Diploma students only)

31 MAY 2017
9:00 a.m. – 11:00 a.m.
(2 Hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of **8 pages**.
2. Answer **ALL** questions in **Section A** on the **OMR sheet**.
3. Answer **ALL** questions in **Section B** in the **Answer Booklet**.

Section A: 40 Multiple Choice Questions (40 marks)
*Instruction: Shade your answers on the **OMR sheet**.*

1. These are the example of input devices **EXCEPT** _____.
   A. scanner
   B. speaker
   C. microphone
   D. digital camera

2. _____ is a condition when you power on a computer from a completely turned-off state.
   A. Restart
   B. Hibernate
   C. Cold boot
   D. Warm boot

3. The size of file in Terabyte is greater than _____.
   A. Exabyte
   B. Petabyte
   C. Gigabyte
   D. Zettabyte

4. _____ is the set of programs to help users to do routine tasks such as writing a research paper.
   A. Software
   B. System software
   C. Operating system
   D. Application software

5. A _____ is a small, lightweight computer that is generally 7 – 10 inches wide and it has a longer battery life.
   A. tablet
   B. netbook
   C. ultrabook
   D. notebook

6. A set of four numbers separated by period that is unique and its commonly referred as a dotted quad also known as _____.
   A. HTTP protocol
   B. browser address
   C. TCP standard protocol
   D. Internet Protocol (IP) address

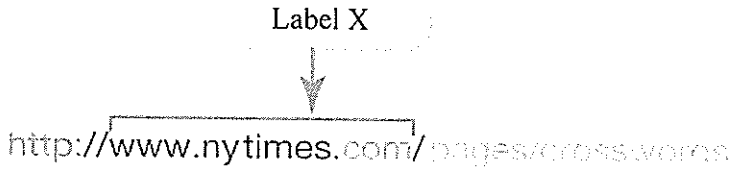
7. The followings are the revolutionary ways of learning and teaching with using web 2.0 **EXCEPT** _____.
   A. creating items online
   B. updating items offline
   C. collaborating items online
   D. downloadable documents

Continued...

8. The _____ is an online collaboration application that allows users to add, remove, or edit its content.
   A. wikis
   B. video log (vlog)
   C. Instant Messaging (IM)
   D. electronic mail (email)

9. A _____ is a form of digital media comprised of a series of audio or video files that are distributed over the Internet.
   A. podcasts
   B. webcasts
   C. interactive gaming
   D. streaming audio and video

10. **Label X** in the following URL address is referred as _____.



   A. path
   B. protocol
   C. domain name
   D. top-level domain

11. _____ is a software that you can access and use it over the Internet without having to install it on your computer.
   A. Productivity software
   B. Open source software
   C. Software as a Service (SaaS)
   D. Desktop publishing (DTP) software

12. Which of the following software is **NOT** designed for the large and specialized businesses?
   A. Project management
   B. Computer-Added Design (CAD)
   C. Desktop publishing (DTP) software
   D. Customer Relationship Management (CRM)

13. _____ is a program that used for creating automated designs, technical drawings, and 3-D model visualizations.
   A. Vertical market software
   B. Computer-aided design (CAD)
   C. Web page-authoring software
   D. Enterprise resource planning (ERP)

Continued...

14. Anti-virus software can be categorized as a (n) _____.
    A. utility software
    B. vertical market software
    C. operating system software
    D. personal productivity software

15. What type of application software that is used specifically for a divergent business?
    A. Vertical market software
    B. Horizontal market software
    C. Personal productivity software
    D. Desktop publishing (DTP) software

16. The _____ enables user to run both MAC OS X and Windows OS at the same time.
    A. partition
    B. V-fusion
    C. boot camp
    D. virtual drive

17. The followings are the Windows 8 apps features **EXCEPT** _____.
    A. preinstalled
    B. displayed full-screen
    C. downloadable from Windows store
    D. all the Windows 8 apps are visible on the Start screen

18. The _____ is a reminder of what the CPU was doing before it started to work on the new task after received the interrupt.
    A. stack
    B. memo
    C. queue
    D. spooler

19. These are the characteristics of basic input/output system (BIOS) **EXCEPT** _____.
    A. stored on ROM
    B. loads OS into RAM
    C. performing general housekeeping tasks
    D. exchange data between the OS and all attached devices

20. The Windows 8 has created special shortcuts called as _____.
    A. bars
    B. charms
    C. pinning
    D. task bars

Continued...

21. James needs a lightweight device and willing to sacrifice some capabilities for less weight. What kind of technology user is he?
    A. Power user
    B. High - technology user
    C. Mobile user
    D. Casual user

22. What makes one CPU different from another?
    A. Clock speed
    B. Single or multiple cores
    C. Amount of cache memory
    D. All of the above.

23. Which of the following is **TRUE** about the levels of cache memory?
    A. Level 1 cache gets the data to the CPU blindingly fast.
    B. Level 2 cache is slower for the CPU to reach but is larger in size than Level 3 cache.
    C. Level 3 cache contains less storage area than Level 2 cache.
    D. None of the above.

24. When would you want to consider RAID 0 technology?
    A. When you only want to have one hard disk drive.
    B. When you need the fastest solution for writing data.
    C. If you think that SSDs are too expensive.
    D. When you need an instant backup of your work.

25. Disk defragmenter utility is used when _____.
    A. hard drive is running low on space, which making system runs slowly
    B. system is slowing down and browser or other programs are behaving strangely
    C. files are spread across many spots on the hard drive and making the hard drive run slowly
    D. system not responding

26. A _____ is a large network designed to provide access to a specific geographic area such as an entire city.
    A. metropolitan area network (MAN)
    B. personal area network (PAN)
    C. local area network (LAN)
    D. wide area network (WAN)

27. The software handles requests for information, Internet access and the use of peripherals for the rest of the network nodes, such as Windows Server, is known as _____.
    A. personal computer operating software
    B. real time operating software
    C. mobile operating software
    D. network operating software

Continued...

28. Below are the reasons that wireless networks are slower than wired networks **EXCEPT** _____.
    A. certain building materials such as metal can decrease network throughput
    B. wireless networks can interfere with the signals on the wired network
    C. wireless networks use specially coded signals to protect their data
    D. signal for wired connection is protected

29. What is the function of a router?
    A. Receives data packets and sends them to their intended nodes on the same network.
    B. During the transmission process, data packets can suffer collisions.
    C. Acts like a traffic signal on a network.
    D. Transfers packets of data between two or more networks (separate network).

30. How to check list of wireless devices that are connected to your router?
    A. Look at the physical router itself.
    B. Log in to the router's IP address and check the configuration page.
    C. Look at the device wireless settings.
    D. All of the above.

31. Which of the following malware that installs itself on the beginning tracks of a hard drive, spreads the infection by simply rebooting the system?
    A. Boot sector virus
    B. Rootkit
    C. Botnet
    D. Macro virus

32. An individual that deliberately attempts to obtain unauthorized access to a computer or network system with the intent to do harm is referred as _____.
    A. zombie
    B. bot
    C. grey hacker
    D. black hacker

33. Firewalls work by closing _____ in your computer.
    A. logical ports
    B. software gaps
    C. backdoors
    D. logical doors

34. What is a type of software program that records all the keystrokes a user enters – such as passwords, account number or conversations?
    A. Keylogger
    B. Data diddler
    C. Macro
    D. Time bomb

Continued...

35. What is the name given to commandeered computers that are often used by botnets to distribute spam and malware?
    A. Rootkits
    B. Zombies
    C. Backdoor
    D. Time bombs

36. Which of the following is **NOT TRUE** about database?
    A. Database is a collection of related data that can be stored, sorted, organized, and queried.
    B. Security of data is disminished.
    C. There are no files to reconcile with each other when using centralized database.
    D. Database provide data centralization where multiple files are maintained.

37. What is the **BEST** database relationship for the following statement?

    One residence hall can be listed for multiple students in a database

    A. One-to-none relationship
    B. Many-to-many relationship
    C. One-to-many relationship
    D. One-to-one relationship

38. A _____ is a large-scale collection of data that contains and organizes in one place all the data from an organization's multiple databases.
    A. database schema
    B. metadata
    C. multidimensional database
    D. data warehouse

39. In business intelligence systems, the tasks of keeping track of business activities is done by _____.
    A. batch processing
    B. summary report
    C. Office Support System (OSS)
    D. Transaction-Processing System (TPS)

40. A system that tried to replicate the decision-making processes of human experts in order to solve specific problems is known as _____ system.
    A. decision support
    B. expert
    C. model management
    D. natural language processing

Continued...

Section B: 4 Structured Questions (60 marks)

*Instruction: Write your answers in the **Answer Booklet**.*

Question 1

a) Define the term "Computer" and describe its **FOUR** major functions.

(5 marks)

b) Differentiate between data and information. Give an example to support your answer.

(3 marks)

c) Briefly describe the process of data transmission on a client/server network.

(4 marks)

d) State **THREE** privacy precautions needed while communicating and collaborating on the Web.

(3 marks)

[TOTAL 15 MARKS]

Question 2

a) Proprietary software and Open source software are the two types of software you can install on your computer. Briefly describe **TWO** characteristics for each type of these software.

(4 marks)

b) State **FIVE** types of productivity software and provide an example for each type.

(5 marks)

c) What is Operating System (OS)? List **TWO** basic functions of OS.

(3 marks)

d) List **THREE** examples of devices that use a real-time operating system (RTOS).

(3 marks)

[TOTAL 15 MARKS]

Question 3

a) Briefly explain **THREE** procedures to ensure system reliability.

(6 marks)

b) Provide **THREE** ways to troubleshoot if the system crashes and rebooting the computer does not help.

(3 marks)

Continued...

c) Discuss **FOUR** benefits and **TWO** disadvantages of setting up networks.

(6 marks)

[TOTAL 15 MARKS]

Question 4

a) Joe found that some of his data files are corrupted and some have disappeared. He suspected his computer was infected with virus. Thus, he ran antivirus software to check.

i. What antivirus software would you recommend to him?

(1 mark)

ii. Explain how the antivirus software works.

(6 marks)

b) Based on **Figure 1.0**, discuss the related validation rules that need to be defined to the related field accordingly.

(8 marks)

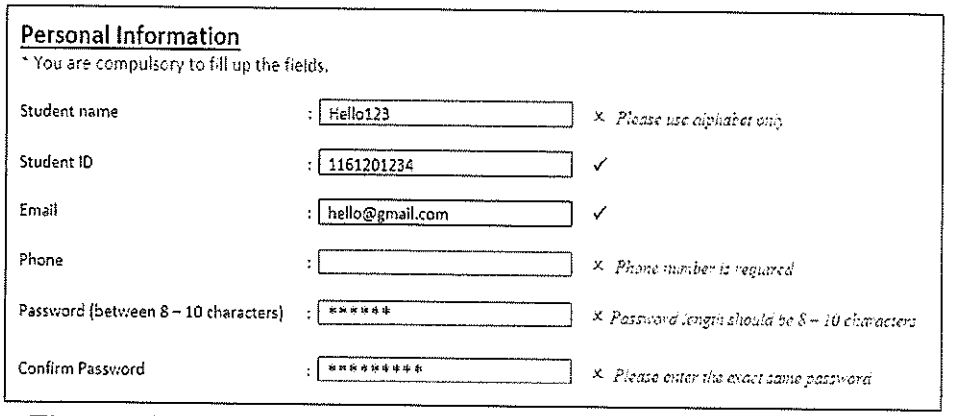

Personal Information
* You are compulsory to fill up the fields.
Student name : Hello123 × Please use alphabet only
Student ID : 1161201234 ✓
Email : hello@gmail.com ✓
Phone : × Phone number is required
Password (between 8 – 10 characters) : ****** × Password length should be 8 – 10 characters
Confirm Password : ********* × Please enter the exact same password

Figure 1.0 *Printscreen of Personal Information Validation Form*

[TOTAL 15 MARKS]

End of Page.